

desire it to be understood, therefore, that this invention is not limited to the particular forms shown and we intend in the appended claims to cover all modifications that do not depart from the spirit and scope of this invention.

What is claimed is:

1. A method of passivating organic devices comprising the steps of:

overcoating a transparent plastic supporting substrate, comprised of a plurality of planar surfaces, with alternating layers of at least one transparent polymer film layer and at least one transparent dielectric material layer;

providing an organic device on the overcoated transparent plastic supporting substrate defining a plurality of pixels; and

sealing the organic device provided on the transparent plastic supporting substrate.

2. A method of passivating organic devices as claimed in claim 1 wherein the at least one polymer film layer is comprised of at least one of fluorinated polymers, parylenes or cyclotenes.

3. A method of passivating organic devices as claimed in claim 1 wherein the at least one polymer film layer is comprised of TEFLON-AF.

4. A method of passivating organic devices as claimed in claim 1 wherein the at least one transparent dielectric material layer is comprised of at least one of silicon monoxide, silicon oxide, silicon dioxide or silicon nitride.

5. A method of passivating organic devices as claimed in claim 1 wherein the step of overcoating the plastic substrate is further comprised of depositing the alternating layers of the at least one polymer film layer and the at least one dielectric material layer on at least one planar surface of the plurality of planar surfaces of the plastic substrate.

6. A method of passivating organic devices as claimed in claim 1 wherein the step of overcoating the plastic substrate is further comprised of the step of depositing the alternate layers of the at least one polymer film layer and the at least one dielectric material layer on the plurality of planar surfaces of the plastic substrate, thereby encapsulating the plastic substrate.

7. A method of passivating organic devices as claimed in claim 1 wherein the step of sealing the organic device provided on the plastic substrate is comprised of the steps of overcoating the organic device with a buffer system including a buffer layer of organic material positioned on the organic device and depositing a low permeability inorganic layer over the buffer system.

8. A method of passivating organic devices as claimed in claim 7 wherein the step of sealing the organic device provided on the plastic substrate includes the step of depos-

iting a thermal coefficient matching layer on buffer layer as a portion of the buffer system.

9. A method of passivating organic devices as claimed in claim 7 wherein the step of sealing the organic device provided on the plastic substrate further includes the step of capping the plurality of pixels with a layer of stable metal.

10. A method of passivating organic devices as claimed in claim 7 wherein the step of sealing the organic device provided on the plastic substrate further includes the step of sealing the organic device by depositing a layer of epoxy encapsulant over the buffer system.

11. A method of passivating organic devices as claimed in claim 7 wherein the step of sealing the organic device provided on the plastic substrate further includes depositing a layer of polymer coated metal foil over the buffer system.

12. A method of passivating organic devices as claimed in claim 1 wherein the step of sealing the organic device provided on the overcoated plastic substrate further includes depositing alternating layers of at least one polymer and at least one metal over the organic device.

13. A method of passivating organic devices as claimed in claim 1 wherein the step of sealing the organic device provided on the overcoated plastic substrate further includes forming at least one of a metal can encapsulant or a metallized plastic encapsulant over the organic device.

14. A method of passivating organic devices comprising the steps of:

overcoating a transparent plastic substrate, comprised of a plurality of planar surfaces, with alternating layers of a polymer, comprised of at least one of fluorinated polymers, parylenes, or cyclotenes, and a transparent dielectric material, comprised of at least one of silicon monoxide, silicon oxide, silicon dioxide or silicon nitride;

providing an array of organic LEDs on the overcoated plastic supporting substrate defining a plurality of pixels; and

sealing the organic device provided on the plastic substrate with at least one of a metal can encapsulant, a metallized plastic encapsulant, an epoxy encapsulant or polymer laminated metal foil.

15. A method of passivating organic devices as claimed in claim 14 further including the steps of overcoating the plurality of pixels with a layer of stable metal, overcoating the layer of stable metal with a buffer layer of one of an organic polymer or an organometallic complex, depositing a thermal coefficient matching layer of active metal on the buffer layer, and depositing a low permeability inorganic layer of stable metal over the thermal coefficient matching layer.

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